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NATURAL RESOURCES

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Director



STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING 1588 West North Temple Salt Lake City, Utah 84116 (801) 533-5771 OIL, GAS, AND MINING BOARD

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MEMORANDUM * * * * * * * * * * * *

TO:

The Board of Oil, Gas and Mining

FROM:

Thomas J. Suchoski, Reclamation Hydrologist

SUBJECT:

Executive Summary - ACT/037/044 Kelmine Corporation - Cub Mine

San Juan County, Utah

DATE:

July 22, 1979

The Board's concurrence is sought for the Division's decision to issue tentative approval to the mining and reclamation plan for the company's reactivation of an abandoned underground uranium mining operation near La Sal, Utah.

The operation is located in Sections 26 and 35, Township 30 South, Range 25 East. The area to be affected by the mining operation and associated facilities is approximately 7 acres.

Attached is an Executive Summary for your information.

TJS/te

EXECUTIVE SUMMARY

KELMINE CORPORATION

Cub Mine ACT/037/044 San Juan County, Utah

LOCATION:

The Kelmine Corporation's underground uranium mining operation is located in Lower Lisbon Valley. This area is approximately 15 miles from La Sal and 21 miles from Monticello. The plan includes an evaporation pond, 16% incline, waste dump, and an upgraded road. A map is included in the appendix for the exact location of the mine.

SOILS AND GEOLOGY:

The Cub Mine is located on Dakota Sandstone with alluvial deposits in the area.

The soils in the area are sandy and appear to have a fairly high infiltration capacity. Kelmine Corporation has agreed to stockpile the topsoil from those areas that will be disturbed and to protect it until reclamation operations will commence. A revegetation test plot is also being installed to aid in determining the best techniques for revegetation.

HYDROLOGY:

The mine site is on a gentle slope away from ephemeral drainages. Little runoff will affect the area.

Minor occurrences of groundwater were encountered during exploratory drilling. Kelmine Corporation feels that such water will be encountered during development of the mine. When such water is encountered it will analized for quality. If it is determined to degrade the environment, in any way, Kelmine Corporation shall construct an evaporation pond to contain this discharge.

ECOLOGY:

The vegetation in the area consists of pinyon pine, juniper, sagebrush, Indian ricegrass, and a species of Brome grass.

Wildlife in the area is mostly small game, though big game animals occasionally use the area.

STRUCTURES AND FACILITIES:

The existing surface facilities consist of an old A-frame over the incline, an old section of track, and an assortment of junk. These facilities will be removed and scrapped.

New facilities for the area will consist of two buildings, a fan, a reworked incline, a waste dump, and a possible evaporation pond.

EXECUTIVE SUMMARY Kelmine Corporation July 22, 1979 Page Two

MINING AND RECLAMATION:

Kelmine Corporation has committed to the items listed below:

During Operations:

- 1. Only areas listed in the Mining and Reclamation Plan will be disturbed or utilized.
- 2. Roads will be upgraded and maintained on a regular basis to enable efficient use and to minimize erosion.
- 3. Mining will be conducted in a safe, sound, technical and prudent minerlike fashion, as outlined in the Mining and Reclamation Plan.
- 4. Setting up revegetation test plots to aid in the reclamation of the disturbed area.

After Operations:

- 1. Abandoned areas will be left in a self-draining and non-impounding condition.
- 2. Comply with all requirements of Rule M-10, Reclamation Standards, wherever applicable.
- 3. All surface debris, scrap metal, discarded wood, and unuseable buildings will be either buried or removed from the site.
- 4. Surface roads that are not used for continuing use will be ripped and seeded.
- 5. Re-seed the reclaimed areas, once, with a diverse seed mix and treatment determined from the revegetation test plots, as specified in the Mining and Reclamation Plan.

IMPACTS:

The Reclamation Plan will help to eliminate safety hazards and reduce environmental and visual impacts of the mining operation. No serious impacts to the environment should be caused by this operation.

EXECUTIVE SUMMARY
Kelmine Corporation
July 22, 1979
Page Three

SURETY ESTIMATE:

Reclamation surety for this operation was estimated to be \$11,008.10 which includes a 5% inflation factor for 5 years of the mine life, to be re-adjusted as required at a review every 5 years.

The surety estimate includes the following work:

- 1. Removal of structures and equipment.
- 2. Removal of trash and debris.
- 3. Regrading of spoil and waste.
- 4. Recontouring of excavations and highwalls.
- 5. Spreading of soils and surficial material.
- 6. Soil preparation, fertilization and scarification.
- 7. Seeding of the disturbed area.
- 8. Supervision.
- 9. Sealing of portal.
- 10. Monitoring of revegetation and reseeding if necessary.
- 11. 5% inflation factor.

A copy of the surety estimate is enclosed.

APPLICATION HISTORY:

April 19, 1979

Received Notice of Intent to Mine and Mining and Reclamation Plan from Kelmine Corporation.

May 8, 1979

Division personnel inspected the mine site.

EXECUTIVE SUMMARY Kelmine Corporation July 22, 1979 Page Four

APPLICATION HISTORY (cont):

May 18, 1979	Division requested an MR-8 commitment to Rule M-10 and information on evaporation pond.			
June 1, 1979	Kelmine Corporation's response with MR-8 and information requested.			
July 10, 1979	Division requested information on reseeding and test plots.			
July 23, 1979	Kelmine Corporation's response with requested information.			

DIVISION OF OIL, GAS, AND MINING BOND ESTIMATE

OPERATOR: Kelmine Corporation
MINE NAME: Cub Mine
LOCATION: Sec. 26 & 35, Township 30 South, Range 25 East

COUNTY: San Juan DATE: July 23, 1979

	Operation			
	oper acton	Amount	Rate	Cost
A.	CLEAN-UP 1. Removal of structures & equipment. 2. Removal of trash & debris. 3. Leveling of ancillary facilities pads and access roads.	Lump sum Lump sum N/A	\$1,000.00 \$ 500.00	\$71,000.00 \$ 500.00
.В.	REGRADING & RECONTOURING 1. Earthwork including haulage and grading of spoils, waste and over-burden.	20 hours	\$85.00/hour	\$ 1,700.00
	2. Recontouring of highwalls and excavations.	10 hours	\$85.00/hour	\$ 850.00
-	3. Spreading of soil or surficial materials.	15 hours	\$85.00/hour	\$ 1,275.00
C.	STABILIZATION 1. Soil preparation, scarification, fertilization, etc. 2. Seeding or planting. 3. Construction of terraces, waterbars, etc.	7 acres 7 acres N/A	\$25.00/acre \$125.00/acre	\$ 175.00 \$ 875.00
D.	LABOR 1. Supervision. 2. Labor exclusive of bulldozer time.	20 hours	\$10.00/hour	\$ 200.00
E.	SAFETY 1. Frection of fences, portal coverings, etc. 2. Removal or neutralization of explosive or hazardous materials.	Sealing of one portal	\$1,000.00	\$ 1,000.00
··	MCRITORING 1. Continuing or periodic monitoring, sampling & testing deemed necessary.	Reseeding of 7 acres if necessary	\$150.00/acre	\$ 1,050.00
G.	OTHER 1. 3% inflation factor for 5 years of the mine life, to reevaluated in 5 years.	CAF = 1.2763	Total	8,625.00 \$ 2,383.10 \$11,008.10

